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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,463	01/30/2006	Fumio Kurotori	5417-0132PUS1	3853

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EXAMINER
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NGUYEN, TUNG X

ART UNIT	PAPER NUMBER
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2829

NOTIFICATION DATE	DELIVERY MODE
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06/11/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,463	<b>Applicant(s)</b> KUROTORI ET AL.	
	<b>Examiner</b> TUNG X. NGUYEN	<b>Art Unit</b> 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 9, 18 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-17, and 19-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-8, 10, 13-17, 19, 21-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Majumdar et al. (u.s.p 5,581,083 heretoafter Majumdar).

As to claims 1, 10, 19 Majumdar discloses in Figs. 1-5, probe card (col. 4, lines 50-55) having plurality of a contact pin (14) for contacting a terminal of an electronic device (20) to supply the electronic device with a signal (as shown in Fig. 1), the contact pin comprising: a first conductive layer (first layer of 28 such as titanium, col. 7, lines 64-67) composed of a first conductive material (titanium) and a second conductive layer (second layer of 28, the metal layer following the titanium, such as gold, col. 7, lines 64-67) composed of a second conductive material (gold), wherein the first conductive layer is formed at the outside from the second conductive layer (col. 7, lines 64-67)

As to claims 3, 12, 21, Majumdar discloses in Figs. 1-5, wherein the contact pin has a taper portion which tapers toward the front end face of the contact pin, and the front end face of the contact pin is flat (having a certain width and length, as shown in Fig. 3)

As to claims 4, 13, 22, Majumdar discloses in Figs. 1-5, wherein both the first and second conductive layer (28 at the end of the tip 14) are exposed at the front end of the

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contact pin at the wafer side (DUT); wherein the pin is further provided with a base material (12 with 14) at the outside of which the first and second conductive layers are formed (28), and the base material (12) being arranged inside the contact pin with the front end of that base material separated by a predetermined distance from the front end of the contact pin (as shown in Fig. 5b).

As to claims 5, 14, and 23, Majumdar discloses in Figs. 1-5, wherein the base material (14) has a taper (tip as shown Fig. 2) portion which tapers toward the front end of the base material, and the front end of the base material is a flat surface (with a certain width and length of 14 as shown in Fig. 3).

As to claims 6, 15, 24, Majumdar discloses in Figs. 1-5, wherein the first conductive layer is formed at the outside from the second conductive layer (the first conductive layer is formed above the second conductive layer, and (col. 7, lines 64-67).

As to claims 7, 16, 25 Majumdar discloses in Figs. 1-5, wherein the first conductive layer circularly surrounds the second conductive layer in the front end of the contact pin, and the first and the second conductive layers form the front end face of the contact pin (as shown in Fig.5b, and col. 7, lines 64-67).

As to claims 8, 17, 26, Majumdar discloses in Figs. 1-5, wherein the second layer (portion of 25 as shown in Fig. 5b, col. 7, lines 64-67) extends between the front end face of the contact pin and the front end of the base material, and the second layer covers the front end of the base material (as shown in Fig. 5b).

***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 11, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majumdar et al. (u.s.p 5,581,083 hereinafter Majumdar), in view of Higgins et al (u.s.p 5,923,178 hereinafter Higgins).

As to claims 2, 11, 20, Majumdar discloses in Figs. 1-5, all of the limitations except for wherein the first conductive material layer has hardness higher than the oxide film formed on the terminal of the electronic device (DUT). However, Higgins discloses in Figs. 1-6, the conductive material (14) has a hardness than the oxide film (62) formed on the terminal of the electronic device (20) for scrubbing the oxide film on the DUT in order to transmitting and/or receiving the signals to/from the tester during test (col. 3, lines 45-60). Therefore, it would have been obvious to a person having an ordinary skill in the art at the time the invention was made to modify the system of Majumdar, and provides the harder material on the tip of the probe, as taught by Higgins, for scrubbing the oxide film on the DUT in order to transmitting and/or receiving the signals to/from the tester during test (col. 3, lines 45-60).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-8, 10-17, and 19-26 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUNG X. NGUYEN whose telephone number is (571)272-1967. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha T. Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. X. N./  
Examiner, Art Unit 2829

/Ha T. Nguyen/

Supervisory Patent Examiner, Art Unit 2829